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    US-09-049-695-3
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em_est1: * em_est1: * em_est4: * em_est4: * em_est5: * em_est5: * em_est6: * em_est1: * 
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58:	57:	56:	55:	54:
est2	em_est25:*	em_est24:*		em_est22:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	53 :	9.	ωι	34	0233	502331
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ω		2	7	35	56845	568450
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## ALIGNMENTS

ACCESSION NID	RESULT 1 AA502331 LOCUS DEFINITION
_	1  AA502331 534 bp mRNA EST 19-AUG-1997 ION ne26h06.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:898523 3' similar to TR:G899433 G899433 PROLINE-RICH ACIDIC PROTEIN. ; mRNA
	1997 1523 3'

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CDNA Library Arraying: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index.
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Seq primer: -40m13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg,
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/ Tissue_type="colon"
//tissue_type="colon"
//lab_host="DH10B"
//note="Vector: pT773D-Pac (Pharmacia) with a modified
//note="Vector: pT773D-Pac (Pharmacia) with a modified polydinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA
was prepared from 12 pooled bulk tumor samples and primed
with a Not I - oligo(dT) primer. Double-stranded cDNA was
ligated to Eco RI adaptors (Pharmacia), digested with Not
I and cloned into the Not I and Eco RI sites of the
modified pT7T3 vector. Library went through one round of
normalization. "
80 a 160 c 178 g 115 t 1 others
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/db_xref="taxon:9606"
/clone="IMAGE:898523"
/clone_lib="NCI_CGAP_CO3"
/sex="pooled"
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On Nov 29, 1993 this sequence version
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Eutheria; Primates; Catarrhini;
1 (bases 1 to 501)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: Robert_Strausberg@nih.gov
Tissue Procurement: Elias Campo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D
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High quality sequence stop: 190.
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                                                      /note="Vector: pT/T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco R; lst strand cDN/was prepared from 12 pooled bulk tumor samples and primed with a Not I - oligo(dT) primer. Double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the
               normalization.
                        modified pT7T3 vector. Library went through one round of
                                                                                                                                                                                                                                               /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:901050"
/clone_lib="NCI_CGAP_Co3"
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/lab_host="DH10B"
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126
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475; Conserv
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                                                                                                                                                                      NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anat
Tumor Gene Index
                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 474)
                                                                 Tissue Procurement: M.D., Ph.D.
                                                                                                                                                 9n
                                                                                                                                                             Unpublished (1997)
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           CDNA Library Preparation: M. Bento Soares, Ph.D. CDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Clone distribution: NCI-CGAP clone distribution
                                                                                                                                                Sep 12, 1996 this sequence version
                                                                                                       act: Robert Strausberg,
(301) 496-1550
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through the I.M.A.G
                                                                              Robert_Strausberg@nih.gov
Procurement: Ilan Kirsch,
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92.48;
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/tissue_type="colon tumor RER+"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/db_xref="taxon:9606"
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/clone="IMAGE:1061175"
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NCI_CGAP_Kid3 Homo
TR:Q60874 Q60874 PF
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Pred. No. 1.5e-79;
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TGCCTGGAAGGATGGGGCCCCTGCCCTGACCTCGTGGCTTCTCCTCGGTGGTCAAGAGTT
                                                                      ACAACCGGGGCCTCTCCTCGCCCTGGTCCTCAGGCGGAGGGTGGTACAGGCTGTCAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cDNA Library Preparation: M. Bento Soares, Ph.D. cDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Clone distribution: NCI-CGAP clone distribution information found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: Robert_Straus
Tissue Procurement:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
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On May 5, 1995 thi
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1 (Dases 1 to 389)

NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.

National Cancer Institute, Cancer Genome Anatomy

Tumor Gene Index
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/db_xref="taxon:9606"
/clone=TiMAGE:1635305"
/clone_lib="NCI_CGAP_Kid3"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Organ: kidney; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer, double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. mRNA source: 2 pooled kidneys. Library went through one round of normalization. Library constructed by Bento Soares and M. Fatima Bonaldo. "
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114 c 137 g
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                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 385; DB 41;
Pred. No. 1.8e-79
0; Mismatches 0
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                                                                                          343;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: est@watson.wustl.edu
Insert Size: 671
High quality sequence stops: 210 Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 671
Std Error: 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M. Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and
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IMAGE:114786 3', mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
Tel: (301) 496-1550
Email: Robert_Strausberg@nih.gov
Email: Robert_Strausberg@nih.gov
the through LLNL; contact the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST
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National Cancer Institute, Cancer Genome Anatomy
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                   61
      /note="Organ: pooled; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Equal amounts of plasmid DNA from three normalized libraries (fetal lung NbHL19W, testis NHT, and B-cell NCI_CGAP_GCB1) were mixed, and ss circles were made in vitro. Following HAP purification, this DNA was used as tracer in a subtractive hybridization reaction. The driver was PCR-amplified cDNAs from pools of 5,000 clones made from the same 3 libraries. The pools consisted of I.M.A.G.E. clones 297480-302087, 682632-687239, 726408-728711, and 72996-731399. Subtraction by Bento Soares and M. Fatima Bonaldo. "
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/lab_host="DH10B"
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T78178.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          T78178 424 bp
yd79c11.rl Soares fetal
IMAGE:114452 5' similar
                                                                                                                                                                                                                         High quality sequence stops: 403 Source: IMAGE Consortium, LLNL rhis clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. Insert Length: 644 Std Error: 0.00 Seq primer: m13RP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 424)

Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST
                                                                                                                                                                                                                                                                                                                       Email: est@watson.wustl.edu
Insert Size: 644
                                                                                                                                                                                                                                                                                                                                                            Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                               4444 Forest Park Parkway,
                                                                                                                                                                                                                                                                                                                                                                                                                Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wilson, R.
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                                                                                                                                                                                      quality sequence stop: 403
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                         /db_xref="GDB:470069"
/db_xref="taxon:9606"
/clone="IMAGE:114452"
/dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
/note="Organ: Liver and Spleen; Vector: pT
                                                    /sex="male"
                                                                      /clone_lib="Soares fetal liver spleen lNFLS"
                                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49.48;
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Pred. No. 1.3e-51;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              liver spleen 1NFLS Homo sapiens cDNA clone to contains PTR5 repetitive element ;, mRN/
                                                                                                                                                                                                                                                                                                                                                                                                 Box 8501, St. Louis,
Spleen; Vector: pT7T3D (Pharmacia)
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JOURNAL
COMMENT
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AUTHORS
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T85588/c
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ORIGIN
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Best Local Simi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATGGGGCCCCTGCCCTGACCTCGTGGCTTCTCCTCCGTGGTCAAGAGTTTCGGCTTCT 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTCAGGACAC---GGCCCAGGGTGTCCTCGGTCTCCATCCAGGCCTTGGTGCCTGGAA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCGACCCCTGGTTCCTCCTCAANCGNAAGNTGGTAACANGCTGTCATGGTCGGGCTCGG 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACAGGGAACAGCACCACCAGCTGGTCGTCCTTCTCCGGAGGCTCCACCACACGGGGGG 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGAATGGGCCCCTGCCCTGACCTCGTGGCTTCTCCTCGGTGGTCAAGAGTTTCGGCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g713940
T85588.1
Email: est@watson.wustl.edu
Insert Size: 671
High quality sequence stops: 241 Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. 1 Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                  Contact: Wilson RK
                                                                                                                                                                             Unpublished (1995)
                                                                                                                                                                                             Wilson,R.
The WashU-Merck EST
                                                                                                                                                                                                                         Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 351)

Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M.,
Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M.,
Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F.,
Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and
                                                                                                                                                                                                                                                                                                                                                                                                                          T85588
                                                                                                                                                                                                                                                                                                                                                                                                                                   T85588 351 bp mRNA
yd82g10.rl Soares fetal liver spleen
IMAGE:114786 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                          human.
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86.7%;
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Pred. No. 2.6e-49;
D; Mismatches 42;
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                                                                                                                 Louis,
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sapiens cDNA
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RESULT
T72043/c
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                                                                                                                                          REFERENCE
                                                                                                                                                                                                              SOURCE
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                                                                                                                                                                                                                                                                                                                DEFINITION
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Best Local Sim
Matches 271;
   TITLE
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                                                                                                                         AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239 ATGGTCGGGGA--CTCAGGACACGGCCCAGGGTGTCCTCGGTCTCCATCCAGGCC 296
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                                                                                                                                                                                                                                                                                                                                                                                                                     ACCACACGGGCGCCCCAGGCTTCTCTGGGTCCTGCTCTGAGNGGCAGTGTTTGACTTGCA 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTTTCGGCTTCTGGACAGGGAACAGCACCAGCTGGTCGTTCTTCTCCGGAGGCTCC 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIGGTGCCTGGAAGGATGGGGCCCCTGCCCTGACCTCGTGGCTTCTCCTCGGTGGTCAAG 356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGTCGGGCTANGGAACTTAAGGAAAAGGCCCAAGGTGTCCTCCGGTCTCCATCCCANCC 276
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCACACGGGCNCCCAGGCCTTCTCTGGGGTCCTGCTCTGAGGGCCAGTGTTTGACTTGCA
              Hillier, L., Lennon, G., Becker, M., Bonaldo, M.F., Chiapelli, B., Chissoe, S., Dietrich, N., DuBuque, T., Favello, A., Gish, W., Chissoe, S., Hultman, M., Kucaba, T., Lacy, M., Le, M., Le, N., Mardis, E., Moore, B., Morris, M., Parsons, J., Prange, C., Rifkin, L., Rohlfing, T., Schellenberg, K., Soares, M.B., Tan, F., Thierry, Meg, J., Trevaskis, E., Underwood, K., Wohldmann, P., Waterston, R., Wilson, R. and Marra, M.
                                                                                                                                                                                                                                            g686564
T72043.1
                                                                                                                                                                                                                                                                                         T72043 378 bp mRNA EST 01-MAR-1995 yc63b05.r1 Stratagene liver (#937224) Homo sapiens cDNA clone IMAGE:85329 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      High
 Generation and analysis of 280,000 human
                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 378)
                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seq primer: M13RP1
                                                                                                                                                                                                              numan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     constructed by Bento Soares and M.Fatima Bonaldo. 100\ c 107\ g 64\ t 4\ others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /dev_stage="20 week-post conception fetus"
/lab_host="DH10B (ampicillin resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="taxon:9606"
/clone="IMAGE:114786"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone_lib="Soares fetal liver spleen lNFLS"
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                                                                                                                                                                                                                                              GI:686564
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hes 25;
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expressed sequence tags
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KEYWORDS
SOURCE
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ORIGIN
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AA335186/c
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                                                    VERSION
                                                                                              ACCESSION
                                                                                                                          DEFINITION
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Best Local S
Matches 256
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MEDLINE
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hes 256;
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                        g1987501
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High qality_sequence stops: 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Washington University Scho
4444 Forest Park Parkway,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome Res. 97044478
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Source: IMAGE Consortium, LLNL
       numan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /dev_stage="49 years old"
/dev_stage="49 years old"
/lab_host="SOLR cells (kanamycin resistant)"
/note="organ: liver; Vector: pBluescript SK; Site_1:
/note="organ: liver; Vector: pBluescript Sk; Site_1:
/note="organ: li
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                                                                                                                       Epididymus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="GDB:502386"
/db_xref="taxon:9606"
/clone="IMAGE:85329"
/clone_lib="Stratagene liver (#937224)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /sex="male"
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Pred. No. 1.3
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                                                                                                                       sapiens
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                                                                                                                       CDNA
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hes 24;
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                      NAACCGG
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182 CAACCGG 188
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Bult, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D.,
White, O., Sutton, G., Blake, J.A., Brandon, R.C., Man-Wai, C.,
Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D.,
Fitzgerald, L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S.,
Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S., Jr.,
Kelley, J.G., Liu, L.-I., Marmaros, S.M., Merrick, J.M.,
Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M.,
Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R.,
Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y.,
Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J.,
Dinke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A.,
He, W.W., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K.,
Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H.,
Raymond, L., Wei, Y.F., Wing, J., Xu, C., Yu, G.L., Ruben, S.M.,
Dillion, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C.,
Fraser, C.M. and Venter, J.C.

Initial assessment of human gene diversity and expression patterns
based upon 83 million nucleotides of cDNA sequence
                                                                                                                                                                                                                                                                                                                             GTAGATGTGGTCTTGGTCTTCCTCCGGTCCCAGGAGCACCTGGTGATTTGGCATCACCCA 181
                                                                                                                                                                                                                                                                                           CCCGGCCTGCTGNGGTTTATTTGTCTAGCTGGGGCAGGGTAGGGAGGGTCCCAGTCCCAA 129
                                                       GTAGATGTGGTCTTGGTCTTCCGCTCCCAGGAGCACCTGGTNATTTGGCATCACCCA
                                                                                                                                                                      CAGCCTGGGCCTTGGGACAGGGCGGGGGCAGTGATGGCCCCTGGAGCCCTACTGGGGGTG
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96026280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: arkerlav@tigr.org
For clone availability, additional sequence and ex
information related to this EST, please check the
Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9712 Medical Center Drive, Tel: 3018699056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   On Nov 29, 1993 this sequence version Other_ESTs: THC104700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Kerlavage, AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fax: 3018699423
                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Organ: epididymis; Vector: pBluescript SK-; Site_1:
ECORI; Site_2: XhoI"
a    68 c   51 g   26 t   3 others
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /db_xref="ATCC (inhost):136917"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
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Pred. No. 2.5e-33;
                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                                                                          Query Match
Best Local S
Matches 219
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
   401
                                                                                                        284
                                                                    341 CTCCTCGGTGGTCAAGAGTTTCGGCTTCTGGACAGGGAACAGCACCACCAGCTGGTCGTC 400
                                                                                                                                                                            Local Similarity hes 219; Conser
CTTCTCCGGAGGCTCCACCACACGGGCGCCCCAGG----CTTCTCTGGGTCCTGCTCTG
                                  CTCCTCGGTGGTCAAGAGTTTCGGCTTCTGGACAGGGAACAGCACNACCAGCTGGTCGTC
                                                                                                        Insert Size: 716
High quality sequence stops: 232 Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Insert Length: 716
Std Error: 0.00
Seq primer: M13RP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M. Parsons,J., Ričkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T86494 357 bp mRNA EST 17-MAR-1995
yd81h10.rl Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone
IMAGE:114691 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Washington University School of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Wilson RK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The WashU-Merck EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wilson, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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314 286 1810
                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                           /db_xref="taxon:9606"
/clone="IMAGE:114691"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/db_xref="GDB:470308"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /dev_stage="20 week-post conception fetus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /clone_lib="Soares fetal liver spleen lNFLS"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             location/Qualifiers
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                                                                                                                                                                                          33.5%;
                                                                                                                                                                            0
                                                                                                                                                                          Score 178.8; DB 2
Pred. No. 4.8e-32;
0; Mismatches 28
                                                                                                                                                                                                           DB 21;
                                                                                                                                                                            28;
                                                                                                                                                                            Indels
                                                                                                                                                                                                           Length 357;
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AUTHORS
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A.,
Bult, C.J., Lee, N. H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D.,
White, O., Sutton, G., Blake, J.A., Brandon, R.C., Man-Mai, C.,
Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D.,
Fitzgerald, L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S.,
Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S. Jr.,
Kelley, J.M., Kelley, J.C., Liu, L. I., Marmaros, S.M., Merrick, J.M.,
Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M.,
Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M.,
Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R.,
Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y.,
Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J.,
Dimke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A.,
He, W.W., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K.,
Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P. S., Olsen, H.,
Raymond, L., Wei, Y.F., Wing, J., Xu, C., Yu, G. L., Ruben, S.M.,
Dillion, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C.,
Fraser, C.M. and Venter, J.C.
Initial assessment of human gene diversity and expression patterns
based upon 83 million nucleotides of cDNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCACAGAAGAAAA 529
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AA299977
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                                                                                                                                                                                                                                                                                                                                                                                                                        For clone availability, additional sequence and epinformation related to this EST, please check the Index (http://www.tigr.org/tdb/hgi/hgi.html)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The Institute for Genomic Research 9712 Medical Center Drive, Rockville, Tel: 3018699056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Kerlavage, AR
                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: M13 Reverse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Email: arkerlav@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota;
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                                                                                                                                 /note="Organ: uterus; Vector: pBluescript SK-;
ECORI; Site_2: XhoI"
80 c 84 g 46 t 4 others
                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/db_xref="ATCC (inhost):192971"
/db_xref="taxon:9606"
                                                                                                                                                                                                            /clone_lib="Uterus tumor I"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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Score 169.2; DB 3
Pred. No. 7.2e-30;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCTCCTCGGTGGTCAAGAGTTTCGGCTTCTGGACAGGAACAGCACCACCAGCTGGTC 397
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similar to
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Location/Qualifiers
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Unpublished (1997)
On Apr 14, 1993 this sequence version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg, Ph.D Tel: (301) 496-1550
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NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
Thefitite. Cancer Genome Anatomy
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AA551860.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONA Library Arraying: Greg Lennon, Ph.D.
DNA Sequencing by: Washington University Genome
Clone distribution: NCI-CGAP clone distribution
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tissue Procurement: Elias Campo, M.D., Michael R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ph.D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Robert_Strausberg@nih.gov
/note="Vector: pT/T3D-Pac (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; Ist strand cDNA was prepared from 12 pooled bulk tumor samples and primed with a Not I - oligo(dT) primer. Double stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT/T3 vector. Library went through one round of normalization. "
                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="IMAGE:928144"
/clone=lib="NCI_CGAP_CO3"
                                                                                                                                                             /tissue_type="colon"
/lab_host="DH10B"
                                                                                                                                                                                                       /sex="pooled"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139 bp mRNA EST 04-SEP-1997
NCI_CGAP_CO3 HOMO SAPIENS CDNA CLONE IMAGE:928144, 3'
TR:G899433 G899433 PROLINE-RICH ACIDIC PROTEIN. ;, mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. MGI:292459
This read is a RESEQUENCE of a previously sequenced mouse clone This read has been verified (found to hit its original self in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 590)

Marra, M., Hillier, L., Allen, M., Bowles, M., Dietrich, N., Dubuque, T. Geisel, S., Kucaba, T., Lacy, M., Le, M., Martin, J., Morris, M., Schellenberg, K., Steptoe, M., Tan, F., Underwood, K., Moore, B., Theising, B., Wylle, T., Lennon, G., Soares, B., Wilson, R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AI323091 590 bp mRNA EST 23-DEC-1998 mj73b06.yl Soares mouse p3NMF19.5 Mus musculus cDNA clone IMAGE:481715 5' similar to gb:028486 Mus musculus uterine-specific proline-rich acidic protein (MOUSE);, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Washington University School of MedicineP 4444 Forest Park Parkway, Box 8501, St. Lo
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Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Marra M/Mouse EST Project WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WashU-HHMI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  quality sequence stop: 444
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                                                           /dev_stage="19.5 dpc total fetus"
/lab_host="DHIOB (ampicillin resistant)"
/note="Vector: pTT3D (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) primer [5', was primed with a Not I - oligo(dT) pri
/organism="Mus musculus"
/db_xref="taxon:10090"
/clone="IMAGE:481715"
                                                                                                                                                                                                                  /clone_lib="Soares mouse p3NMF19.5"
/dev_stage="19.5 dpc total fetus"
                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
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RESULT 15
AI391147/c
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JOURNAL
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                                                                                                          AUTHORS
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nes 291; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCATCACCCACAACCGGGGCCTCTCCTCGCCCTGGTCCTCAGGCGGAGGGTGGTAC 230
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCCAGGGCTCTAGTATCCCAGACCTTCTCTGTTTCCTGTTCAGGGAACACATGTTTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGCTGTCAAGATCCAGTTCTGGACCCTGAAGAGGACTGCGAAGAT-----GGCTCAGGA 319
                                                                                                                                                                                                                                              mc16g01.yl Soares mouse p3NWF19.5 Mus musculus cDNA clone IMAGE:348720 5' similar to gb:U28486 Mus musculus uterine-specific proline-rich acidic protein (MOUSE);, mRNA sequence.
AI391147
g4217154
                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 560)

Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Wasterstein B. and Wilson B.
              Waterston, R. and Wilson, R. The WashU-NCI Mouse EST Project 1999
                                                                                                                                                                                                                  EST
                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                                                   AI391147.1
                                                                                                                                                                                              house mouse
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167 c 151 g 118 t 2 others
(1999)
                                                                                                                                                                                                                                   GI:4217154
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Pred. No. 3.1e-20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    44;
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                                                                   Schurk, R.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                551 GTCACAACAGCCTAGACCTCAGGAAAGGAGTGGAAGAGTGGTTAGGGCTTTCAAGAATCC 492
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTGGGGGTGGTAGATGTGGTCTTGGTCTTCCTCCGGTCCCAGGAGCACCTGGTGATTT 170
                    ACTTGCATCTTGATAGGGAACTTGGGTGCTGGGAATGCACCTGCCTCCCACAGAAGAAAA 529
                                                                                 GGCTCCACCACACGGCGCCCCAG-GCTTCTCTGGGTCCTGCTCTGAGNGGCAGTGTTTG 469
                                                                                                                                                              GTCAAGAGTTTCGGCTTCTGGACAGGGAACAGCACCACCAGCTGGTCGTCCTTCTCCGGA 410
                                                                                                                                                                                                                      TATCCTCAGTCTCCACNCAGGTCATGGC-----ATCTGGACGCTTTTCCTCGGCA 267
                                                                                                                                                                                                                                                                CAGGCCTTGGTGCCTGGAAGGATGGGGCCCCTGCCCTGACCTCGTGGCTTCTCCTCGGTG
                                                                                                                                                                                                                                                                                                                            AGGCTGTCATGGTCGGGCTCGGGACTCAGGACACGGCCCAGGGTGTCCTCGGTCTCCATC
                                                                                                                                                                                                                                                                                                                                                                                    AGGATGGGCCGTGACTGGGGCACTTCTTCATCCTGGACATCGTCAGACATGGGATGGTCT 372
                                                                                                                                                                                                                                                                                                                                                                                                           GGCATCACCCACAACCGGGGCCTCTCCTCGCCCTGGTCCTCCTCAGGCGGAGGGTGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCATAGAGTGGGCGAGGTGAAGGTCCTCCTCTGGTCCCTGCAGCACCTGACGATAC 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCCCAACAGCCTGGGCCTTGGGACAGGGCGGGGGGCAGTGAT----GGCCCCTGGAGCCC 110
                                                            GGCTCCAGGGCTCTAGTATCCCAGACCTTCTCTGTTTCCTGTTCAGGGAACACATGTTTG
                                                                                                                                         GCTGCAGGCTTCTGTTTGGGTTCAGGAAGCAGTGGCCCCAGCTGGTTGTCCTTTTCAAGA
                                                                                                                                                                                                                                                                                                       ATGCTGTCAAGATCCAGTTCTGGACCCTGAAGAGGACTGCGAAGAT-----GGCTCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This clone is available royalty-free through LINL; contact the IMAGE Consortium (info@image.llnl.gov) for further information. This read is a RESEQUENCE of a previously sequenced mouse clone this read has been verified (found to hit its original self in t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Marra M/WashU-NCI Mouse EST Project 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             correct orientation)
Seq primer: -40RP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         On May 18,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    136
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone_lib="Soares mouse p3NMF19.5"
/dev_stage="19.5 dpc total fetus"
/lab_host="DH10B (ampicillin resistant)"
/lab_host="DH10B (ampicillin resistant)"
/note="Vector: p773D (Pharmacia) with a modified
polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA
was primed with a Not I - oligo(dT) primer [5'
was primed with a Not I - oligo(dT) primer [5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /map="9"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Mus musculus"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone="IMAGE:348720"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1995 this sequence version replaced gi:811473.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 126.2; DB 45
Pred. No. 7.1e-20;
0; Mismatches 175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          486
DB 45;
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